

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1-25. (Cancelled)

26. (New) A method implemented within a client side device for facilitating redirection of traffic between a server and a client to between the client and a selected one from a plurality of replicas, the method comprising:

at a client side device associated with the client, receiving a start packet from a client associated with the client side device, the start packet having a destination identifier associated with a server;

at the client side device adding a tag to the start packet to indicate that the start packet should be later forwarded by a device other than a client side device to any replica that duplicates the data content of the server;

at the client side device storing the destination address of the start packet and associating the destination address with the start packet's connection; and

after tagging the start packet, forwarding the start packet towards the server.

27. (New) A method as recited in claim 26, further comprising:

at the client side device, receiving an acknowledgement packet in response to the start packet;

at the client side device, when the acknowledgement packet is the first received acknowledgement for such start packet and a replica of the server is the source of the acknowledgement packet, storing the replica's address and associating the replica's address with the stored server address for this connection;

at the client side device, after storing and associating the replica address of the first acknowledgement packet, replacing the replica's address of the acknowledgement packet with the stored server address and then forwarding the acknowledgement packet to the client;

at the client side device when the acknowledgement packet is not the first received acknowledgement packet for such start packet, forwarding a reset to the source of the acknowledgement packet; and

at the client side device when the acknowledgement packet is the first received acknowledgement packet for such start packet and when the server is the source of the acknowledgement packet, deleting the stored server address for this connection.

28. (New) A method as recited in claim 27, further comprising:

at the client side device when a subsequent packet associated with the start packet is received that is not a start packet or an acknowledgement packet and when there is a replica address stored for this connection and when the subsequent packet is from the client, replacing the destination address of the subsequent packet with the stored replica address for this connection prior to forwarding the subsequent packet towards its destination;

at the client side device when a subsequent packet associated with the start packet is received that is not a start packet or an acknowledgement packet and when there is a replica address stored for this connection and when the subsequent packet is not from the client, replacing the source address of the subsequent packet with the stored server address for this connection prior to forwarding the subsequent packet towards its destination; and

forwarding the subsequent packet towards its destination.

29. (New) A method as recited in claim 27, further comprising:

at the client side device, when the acknowledgement packet is the first received acknowledgement for such start packet, cracking the acknowledgement packet to obtain the source identifier prior to storing the replica's address and associating the replica's address with the stored server address for this connection; and

at the client side device, encapsulating the cracked acknowledgement packet with a source address associated with the packet prior to forwarding the acknowledgement packet to the client.

30. (New) A method as recited in claim 29, further comprising:

at the client side device when a subsequent packet associated with the start packet is received that is not a start packet or an acknowledgement packet and when there is a replica address stored for this connection and when the subsequent packet is from the client, replacing the destination address of the subsequent packet with the stored replica address for this connection and then forwarding the subsequent packet towards its destination; and

at the client side device when a subsequent packet associated with the start packet is received that is not a start packet or an acknowledgement packet and when the subsequent packet is not from the client, forwarding the subsequent packet towards its destination.

31. (New) A method as recited in claim 27, further comprising:

at the client side device, cracking the acknowledgement packet to obtain the source identifier prior to storing the replica's address or forwarding a reset to the source of the acknowledgement packet; and

wherein the cracked acknowledgement packet is forwarded to the client.

32. (New) A method as recited in claim 31, further comprising:

at the client side device when a subsequent packet associated with the start packet is received that is not a start packet or an acknowledgement packet and when there is a replica address stored for this connection and when the subsequent packet is from the client, encapsulating the subsequent packet with the stored replica address for this connection prior to forwarding the subsequent packet towards its destination;

at the client side device when a subsequent packet associated with the start packet is received that is not a start packet or an acknowledgement packet and when there is a replica address stored for this connection and when the subsequent packet is not from the client, cracking the subsequent packet prior to forwarding the subsequent packet towards its destination; and

forwarding the subsequent packet towards its destination.

33. (New) A method as recited in claim 26, wherein the start packet is only tagged when the start packet is associated with web data, and the method further comprising forwarding the start packet to the server without the tag when the start packet is not associated with web data.

34. (New) A method as recited in claim 33, wherein the start packet is associated with web data when the start packet has a destination port utilized for accessing web data.

35. (New) A computer system for facilitating redirection of traffic between a server and a client to between the client and a selected one from a plurality of replicas, the computer system comprising:

a memory; and

a processor coupled to the memory,
wherein at least one of the memory and the processor are adapted to provide:

receiving a start packet from a client associated with the client side device, the start packet having a destination identifier associated with a server;

adding a tag to the start packet to indicate that the start packet should be later forwarded by a device other than a client side device to any replica that duplicates the data content of the server;

storing the destination address of the start packet and associating the destination address with the start packet's connection; and

after tagging the start packet, forwarding the start packet towards the server.

36. (New) A computer system for as recited in claim 35, wherein the at least one of the memory and the processor are further adapted for:

at the client side device, receiving an acknowledgement packet in response to the start packet;


at the client side device, when the acknowledgement packet is the first received acknowledgement for such start packet and a replica of the server is the source of the acknowledgement packet, storing the replica's address and associating the replica's address with the stored server address for this connection;

at the client side device, after storing and associating the replica address of the first acknowledgement packet, replacing the replica's address of the acknowledgement packet with the stored server address and then forwarding the acknowledgement packet to the client;

at the client side device when the acknowledgement packet is not the first received acknowledgement packet for such start packet, forwarding a reset to the source of the acknowledgement packet; and

at the client side device when the acknowledgement packet is the first received acknowledgement packet for such start packet and when the server is the source of the acknowledgement packet, deleting the stored server address for this connection.

37. (New) A computer system for as recited in claim 36, wherein the at least one of the memory and the processor are further adapted for:

 at the client side device when a subsequent packet associated with the start packet is received that is not a start packet or an acknowledgement packet and when there is a replica address stored for this connection and when the subsequent packet is from the client, replacing the destination address of the subsequent packet with the stored replica address for this connection prior to forwarding the subsequent packet towards its destination;

at the client side device when a subsequent packet associated with the start packet is received that is not a start packet or an acknowledgement packet and when there is a replica address stored for this connection and when the subsequent packet is not from the client, replacing the source address of the subsequent packet with the stored server address for this connection prior to forwarding the subsequent packet towards its destination; and

forwarding the subsequent packet towards its destination.

38. (New) A computer system for as recited in claim 36, wherein the at least one of the memory and the processor are further adapted for:

at the client side device, when the acknowledgement packet is the first received acknowledgement for such start packet, cracking the acknowledgement packet to obtain the source identifier prior to storing the replica's address and associating the replica's address with the stored server address for this connection; and

at the client side device, encapsulating the cracked acknowledgement packet with a source address associated with the packet prior to forwarding the acknowledgement packet to the client.

39. (New) A computer system for as recited in claim 38, wherein the at least one of the memory and the processor are further adapted for:

at the client side device when a subsequent packet associated with the start packet is received that is not a start packet or an acknowledgement packet and when there is a replica address stored for this connection and when the subsequent packet is from the client, replacing the destination address of the subsequent packet with the stored replica address for this connection and then forwarding the subsequent packet towards its destination; and

at the client side device when a subsequent packet associated with the start packet is received that is not a start packet or an acknowledgement packet and when the subsequent packet is not from the client, forwarding the subsequent packet towards its destination.

40. (New) A computer system for as recited in claim 36, wherein the at least one of the memory and the processor are further adapted for:

at the client side device, cracking the acknowledgement packet to obtain the source identifier prior to storing the replica's address or forwarding a reset to the source of the acknowledgement packet; and

wherein the cracked acknowledgement packet is forwarded to the client.

41. (New) A computer system for as recited in claim 40, wherein the at least one of the memory and the processor are further adapted for:

(A) at the client side device when a subsequent packet associated with the start packet is received that is not a start packet or an acknowledgement packet and when there is a replica address stored for this connection and when the subsequent packet is from the client, encapsulating the subsequent packet with the stored replica address for this connection prior to forwarding the subsequent packet towards its destination;

at the client side device when a subsequent packet associated with the start packet is received that is not a start packet or an acknowledgement packet and when there is a replica address stored for this connection and when the subsequent packet is not from the client, cracking the subsequent packet prior to forwarding the subsequent packet towards its destination; and

forwarding the subsequent packet towards its destination.

42. (New) A computer system for as recited in claim 35, wherein the start packet is only tagged when the start packet is associated with web data, and the method further comprising forwarding the start packet to the server without the tag when the start packet is not associated with web data.

43. (New) A computer system for as recited in claim 42, wherein the start packet is associated with web data when the start packet has a destination port utilized for accessing web data.

44. (New) A computer program product for facilitating redirection of traffic between a server and a client to between the client and a selected one from a plurality of replicas, the computer program product comprising:

at least one computer readable medium;

computer program instructions stored within the at least one computer readable product configured to:

at a client side device associated with the client, receiving a start packet from a client associated with the client side device, the start packet having a destination identifier associated with a server;

at the client side device adding a tag to the start packet to indicate that the start packet should be later forwarded by a device other than a client side device to any replica that duplicates the data content of the server;

at the client side device storing the destination address of the start packet and associating the destination address with the start packet's connection; and

after tagging the start packet, forwarding the start packet towards the server.

45. (New) A computer program product as recited in claim 44, wherein the computer program instructions stored within the at least one computer readable product are further configured to:

at the client side device, receiving an acknowledgement packet in response to the start packet;

at the client side device, when the acknowledgement packet is the first received acknowledgement for such start packet and a replica of the server is the source of the acknowledgement packet, storing the replica's address and associating the replica's address with the stored server address for this connection;

at the client side device, after storing and associating the replica address of the first acknowledgement packet, replacing the replica's address of the acknowledgement packet with the stored server address and then forwarding the acknowledgement packet to the client;

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at the client side device when the acknowledgement packet is not the first received acknowledgement packet for such start packet, forwarding a reset to the source of the acknowledgement packet; and

at the client side device when the acknowledgement packet is the first received acknowledgement packet for such start packet and when the server is the source of the acknowledgement packet, deleting the stored server address for this connection.

46. (New) A computer program product as recited in claim 45, wherein the computer program instructions stored within the at least one computer readable product are further configured to:

at the client side device when a subsequent packet associated with the start packet is received that is not a start packet or an acknowledgement packet and when there is a replica address stored for this connection and when the subsequent packet is from the client, replacing the destination address of the subsequent packet with the stored replica address for this connection prior to forwarding the subsequent packet towards its destination;

at the client side device when a subsequent packet associated with the start packet is received that is not a start packet or an acknowledgement packet and when there is a replica address stored for this connection and when the subsequent packet is not from the client, replacing the source address of the subsequent packet with the stored server address for this connection prior to forwarding the subsequent packet towards its destination; and

forwarding the subsequent packet towards its destination.

47. (New) A computer program product as recited in claim 45, wherein the computer program instructions stored within the at least one computer readable product are further configured to:

at the client side device, when the acknowledgement packet is the first received acknowledgement for such start packet, cracking the acknowledgement packet to obtain the source identifier prior to storing the replica's address and associating the replica's address with the stored server address for this connection; and

at the client side device, encapsulating the cracked acknowledgement packet with a source address associated with the packet prior to forwarding the acknowledgement packet to the client.

48. (New) A computer program product as recited in claim 47, wherein the computer program instructions stored within the at least one computer readable product are further configured to:

at the client side device when a subsequent packet associated with the start packet is received that is not a start packet or an acknowledgement packet and when there is a replica address stored for this connection and when the subsequent

packet is from the client, replacing the destination address of the subsequent packet with the stored replica address for this connection and then forwarding the subsequent packet towards its destination; and

at the client side device when a subsequent packet associated with the start packet is received that is not a start packet or an acknowledgement packet and when the subsequent packet is not from the client, forwarding the subsequent packet towards its destination.

49. (New) A computer program product as recited in claim 45, wherein the computer program instructions stored within the at least one computer readable product are further configured to:

at the client side device, cracking the acknowledgement packet to obtain the source identifier prior to storing the replica's address or forwarding a reset to the source of the acknowledgement packet; and

wherein the cracked acknowledgement packet is forwarded to the client.

50. (New) A computer program product as recited in claim 49, further comprising:

at the client side device when a subsequent packet associated with the start packet is received that is not a start packet or an acknowledgement packet and when there is a replica address stored for this connection and when the subsequent packet is from the client, encapsulating the subsequent packet with the stored replica address for this connection prior to forwarding the subsequent packet towards its destination;

at the client side device when a subsequent packet associated with the start packet is received that is not a start packet or an acknowledgement packet and when there is a replica address stored for this connection and when the subsequent

packet is not from the client, cracking the subsequent packet prior to forwarding the subsequent packet towards its destination; and
forwarding the subsequent packet towards its destination.

51. (New) A computer program product as recited in claim 44, wherein the start packet is only tagged when the start packet is associated with web data, and the method further comprising forwarding the start packet to the server without the tag when the start packet is not associated with web data.

A 52. (New) A computer program product as recited in claim 51, wherein the start packet is associated with web data when the start packet has a destination port utilized for accessing web data.

53. (New) A client side device for facilitating redirection of traffic between a server and a client to between the client and a selected one from a plurality of replicas, comprising:

means for receiving a start packet from a client associated with the client side device, the start packet having a destination identifier associated with a server;

means for adding a tag to the start packet to indicate that the start packet should be later forwarded by a device other than a client side device to any replica that duplicates the data content of the server;

means for storing the destination address of the start packet and associating the destination address with the start packet's connection; and

means for after tagging the start packet, forwarding the start packet towards the server.

54. (New) A method implemented within a server side device of facilitating redirection of traffic between a client and a server or a plurality of replicas of the server, the method comprising:

at a server side device receiving a packet that is traveling between a client and a server or between the client and a replica, the server and the replica being associated with the server side device;

at the server side device when the received packet is a start packet being sent from the client to the server and the start packet is tagged by a device other than a server side device and the server's data content is replicable, encapsulating the start packet and forwarding the encapsulated start packet to any replica that duplicates the data content of the server; and

forwarding the received packet to its specified destination.

55. (New) A server system operable to facilitate redirection of traffic between a client and a server or a plurality of replicas of the server, the computer system comprising:

a memory; and

a processor coupled to the memory,

wherein at least one of the memory and the processor are adapted for:

receiving a packet that is traveling between a client and a server or between the client and a replica, the server and the replica being associated with the server side device;

when the received packet is a start packet being sent from the client to the server and the start packet is tagged by a device other than a server side device and the server's data content is replicable, encapsulating the start packet and forwarding the encapsulated start packet to any replica that duplicates the data content of the server; and

forwarding the received packet to its specified destination.

56. (New) A computer program product for facilitating redirection of traffic between a client and a server or a plurality of replicas of the server, the computer program product comprising:

at least one computer readable medium;

computer program instructions stored within the at least one computer readable product configured for:

receiving a packet that is traveling between a client and a server or between the client and a replica, the server and the replica being associated with the server side device;

when the received packet is a start packet being sent from the client to the server and the start packet is tagged by a device other than a server side device and the server's data content is replicable, encapsulating the start packet and forwarding the encapsulated start packet to any replica that duplicates the data content of the server; and

forwarding the received packet to its specified destination.

57. (New) An apparatus for facilitating redirection of traffic between a client and a server or a plurality of replicas of the server, comprising:

means receiving a packet that is traveling between a client and a server or between the client and a replica, the server and the replica being associated with the server side device;

means receiving when the received packet is a start packet being sent from the client to the server and the start packet is tagged by a device other than a server side device and the server's data content is replicable,

encapsulating the start packet and forwarding the encapsulated start packet
to any replica that duplicates the data content of the server; and

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means receiving forwarding the received packet to its specified
destination.
